Patent Claims

1. Method for using utilizable data, in data formats which cannot be directly processed, in communication, in particular wireless communication, between at least two geodetic devices comprising

a first device (8, 11') having communication means,

a second device (9, 9', 11, 15) having

- communication means (12),
- means for processing utilizable data (13) and
- storage means (14),

comprising the steps

- transmission of data by the first device (8, 11'), the data being transmitted in data formats having a sequence of at least two data fields,

- reception of the data and processing of utilizable data by the second device (9, 9', 11, 15), the utilizable data being read from data fields which can be evaluated,

characterized in that particularly in relation to the transmission of the data, at least one reference directory (10) is transmitted and is stored in the storage means (14), the reference directory (10) indicating, in data formats which

cannot be directly processed, the data fields which can be evaluated.

2. Method according to Claim 1, characterized in that a data directory in which data fields and/or data types are defined is transmitted.

3. Method according to Claim 1 or 2, characterized in that the data formats are uniquely defined by a coding (4), in particular a numeric or alphanumeric coding.

4. Method according to any of the preceding Claims, characterized in that, in one of the data formats, at least one data field with a fixed length is chosen, in particular with a length required by the format of geodetic location or time data.

5. Method according to any of the preceding Claims, characterized in that, when receiving the data or processing utilizable data, at least one data field which cannot be evaluated is suppressed in the data format which cannot be directly processed, so that only one sequence of data fields which can be evaluated is received and/or evaluated.

6. Method according to any of the preceding Claims, characterized in that, when receiving the data or processing utilizable data in data formats which cannot be directly processed, at least one data field which can be evaluated is localized within the sequence of data fields.

7. Method according to any of the preceding Claims, characterized in that the indication of data fields which can be evaluated in the reference directory (10) is effected by at least one of the two measures

- specification of the sequence of data fields in data formats which cannot be directly processed, so that data fields which can be evaluated are localized,

- specification of a change of known data formats, so that the sequence of data fields in the data formats which cannot be directly processed can be derived and data fields which can be evaluated can be localized.

8. Method according to any of the preceding Claims, characterized in that, on transmission of the data, the first device transmits data (8, 11') to a plurality of second devices (9, 9', 11, 15).

9. Method according to any of the preceding Claims, characterized in that the transmission of the reference directory (10) is initiated by at least one of the following measures

- establishment of a communication connection between first (8, 11') and second device (9, 9', 11, 15),
- detection of a set time mark, in particular periodic time mark, during the existence of a communication connection between first device (8,

11') and second device (9, 9', 11, 15),

- elapse of a counting procedure,
- execution of a defined procedure in the first device (8, 11'),
- transmission of a message by the second device (9, 9', 11, 15) indicating that a data format which cannot be directly processed is being received or was received,
- transmission of a message by the second device (9, 9', 11, 15), in which message the data formats which can be directly processed by this second device (9, 9', 11, 15) are defined.

10. Computer program product comprising program code which is stored on a machine-readable medium, for carrying out the step of receiving data and processing utilizable data of the method according to any of Claims 1 to 9, in particular if the program is executed in a computer (13).

11. Analogue or digital computer data signal, embodied by an electromagnetic wave, comprising a program code segment for carrying out the step of receiving data and processing usable data of the method according to any of Claims 1 to 9, in particular if the program code is executed in a computer (13).

12. Reference directory (10) or data directory as a code which is stored on a machine-readable medium, for carrying out the method according to any of Claims 1 to 9, in particular if the code is used in a computer (13).

13. Reference directory (10) or data directory as an analogue or digital computer data signal, embodied by an electromagnetic wave comprising a code segment for carrying out the method according to any of Claims 1 to 9, in particular if the code segment is used in a computer (13).

14. Geodetic device, in particular reference station for differential GNSS or theodolite, as a first device (8, 11') for carrying out the method according to any of Claims 1 to 9, comprising communication means, characterized in that the communication means (12) are designed for transmitting a reference directory (10) or data directory.

15. Geodetic device according to Claim 14, characterized in that the communication means (12) are formed so that the transmission of the reference directory (10) or of the data directory is initiated by at least one of the following events

- establishment of a communication connection to a second device (9, 9', 11, 15),
- detection of a set time mark, in particular of a periodic time mark,
- end of a counting procedure,
- execution of a defined procedure,
- reception of a warning message of a second device (9, 9', 11, 15) stating that a data format which cannot be directly processed is being received or was received,

- reception of a message of a second device (9, 9', 11, 15), in which message the data formats which can be directly processed by this second device (9, 9', 11, 15) are defined.

16. Geodetic device, in particular rover for differential GNSS, as a second device (9, 9', 11, 15) for carrying out the method according to any of Claims 1 to 8, comprising

- communication means (12),
- means for processing utilizable data (13) and
- storage means (14),

characterized in that the communication means (12) and the storage means (14) are formed and arranged in such a way that a reference directory (10) or a data directory is received and stored.

17. Geodetic device according to Claim 15, characterized in that the communication means (12) or the means for processing utilizable data (13) are designed so that data fields which can be evaluated and are contained in data formats which cannot be directly processed are identified by indication in the reference directory (10).

18. Geodetic device according to either of Claims 15 and 16, characterized in that the communication means (12) or the means for processing utilizable data (14) are designed so that data fields which cannot be evaluated in the data format which cannot be directly processed are suppressed during

the reception of the data or the processing of utilizable data.

19. Geodetic device according to any of Claims 15 to 17, characterized in that the communication means (12) or the means for processing utilizable data (14) are designed so that data fields which can be evaluated in the data format which cannot be directly processed are localized during the reception of the data or processing of utilizable data within the sequence of data fields.

20. Geodetic system, in particular differential GNSS system, for carrying out the method according to any of Claims 1 to 8, comprising

at least one first device (8, 11') according to Claim 13 and
at least one second device (9, 9', 11, 15) according to any of Claims 14 to 18.